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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,403	08/14/2001	Konstantinos Poulakis	42014	8307
7590	03/22/2004		EXAMINER	
Mark S Bicks Roylance Abrams Berdo & Goodman 1300 19th Street NW Suite 600 Washington, DC 20036			EASHOO, MARK	
			ART UNIT	PAPER NUMBER
			1732	
DATE MAILED: 03/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

51x

<b>Office Action Summary</b>	<b>Application No.</b> 09/913,403	<b>Applicant(s)</b> POULAKIS, KONSTANTINOS	
	<b>Examiner</b> Mark Eashoo, Ph.D.	<b>Art Unit</b> 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election*

Applicant's election with traverse of claim group I, claims 1-8, in papers filed 09-FEB-2004 is acknowledged. The traversal is on the ground(s) that both claim groups relate to a single inventive concept. This is not found persuasive because applicant's argument fails to address that the special technical feature of apparatus is taught by Chesley et al. (US Pat. 5,785,784), which is proper grounds for restriction under PCT rules.

The requirement is still deemed proper and is therefore made FINAL.

Claim 9 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claim grouping, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in papers filed 09-FEB-2004.

### *Drawings*

The submitted drawings of record appear incorrect and similar to those of process shown by Tamura et al. (US Pat. 5,281,371). The correct drawing, according to the description in the original specification, are found in WO 00/48812 (ie. the priority document). It is requested that applicant send in a new copy of the of the drawings to correct the USPTO records.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 3, 5, 6, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

Claim 2 recites the broad recitation, "urethane acrylates" and the claim also recites "preferably being aliphatic... urethane acrylates" which is the narrower statement of the range/limitation.

Claim 3 recites the broad recitation, "diluent" and the claim also recites "preferably monomers" which is the narrower statement of the range/limitation.

Claim 3 also recites the broad recitation, "preferably monomers" and the claim also recites "particularly preferably acrylates" which is the narrower statement of the range/limitation.

Claim 3 also recites the broad recitation, "particularly preferably acrylates" and the claim also recites "preferably being monofunctional acrylates" which is the narrower statement of the range/limitation.

Claim 3 also recites the broad recitation, "trifunctional acrylates" and the claim also recites "particular preference being given to... triacrylate" which is the narrower statement of the range/limitation.

Claim 6 recites the broad recitation, "photoinitiator" and the claim also recites "preferably 2-hydroxy-2-methyl-1-phenylpropan-1-one" which is the narrower statement of the range/limitation.

Claim 8 recites the broad recitation, "150 to 20,000 mPa · s" and the claim also recites "preferably from 300 to 5,000 mPa · s" which is the narrower statement of the range/limitation.

Also regarding claim 2, the phrase "in particular acrylic" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

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Regarding claim 5, the phrase "preferably also encompasses... one photoinitiator" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 4-8 are rejected under 35 USC 103(a) as being unpatentable over Chesley et al. (US Pat. 6,579,162).

Regarding claims 1 and 8: Chesley et al. teaches the basic claimed method of making a hook/cling fastener product, comprising: a radiation-crosslinkable molding material (8:47-9:33); compression molding between rolls to form a number of interlocking means and a base(8:47-9:33); and radiation curing of the molding material (8:47-9:33).

Chesley et al. does not teach use of prepolymers. It is noted that the term prepolymers is readily understood in the art of molding thermosetting polymers essentially as low to medium molecular weight, multi-functional, flowable/viscous, and polymerizable resins. Prepolymers of various compositions, for example acrylates, epoxys, and ureathanes are well known in the art of molding thermosetting polymers. At the time of invention a person of ordinary skill in the art would have found it obvious, if not inherent, to have used a prepolymer molding material, as commonly practiced in the art, in the process of Chesley et al., and would have been motivated to do so in order to provide a flowable material with an appropriate viscosity that would not run out of the rotating mold roll before it is cured.

It is noted that the above mentioned "appropriate viscosity" would have been determined through routine experimentation and optimization procedures commonly practiced in the art (ie. claim 8).

Regarding claim 2: Chesley et al. teaches acrylic/acrlate resins (9:10-12).

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Regarding claim 4: Chesley et al. teaches electron beam curing (9:5-10).

Regarding claim 5: Chesley et al. teaches curing with UV radiation (9:5-10). Although not specifically claimed, it would have been inherent to have used an initiator in the molding resin to aid in curing. If it would not have been inherent, then it would have been obvious to have used an initiator in the molding resin of Chesley et al. to aid in curing, as commonly, practiced in the art, in order to quickly start the curing process.

Regarding claim 6: Chesley et al. does not teach specific photoinitiators. Nonetheless, various photoinitiators are well known in the art and commercially available (eg. Darocur 1173 from Ciba Geigy). At the time of invention a person of ordinary skill in the art would have found it obvious to have used a commercially available photoinitiator such as Darocur 1173 from Ciba Geigy, in the process of Chesley et al., and would have been motivated to do so in order to use a photoinitiator with known initiation properties and reaction rates.

Regarding claim 7: Chesley et al. teaches a shaping roll having cavities thereon and backing rolls (8:25-9:33), which are inherent of some of the process cited by Chesley et al. (see Figs. 5-7, Chesley et al., US Pat. 5,785,784 for examples of calendar coating, curtain coating, and extrusion coating).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chesley et al. (US Pat. 6,579,162), as applied to claims 1, 2, and 4-8 above, and further in view of Makhlof et al. (US Pat. 4,477,405).

Chesley et al. teaches the basic claimed process as set forth above.

Regarding claim 7: Chesley et al. does not teach a thermosetting molding material having reactive diluents. However, Makhlof et al. teaches a thermosetting molding material having reactive diluents, such as butyl acrylate and 2-ethylhexyl acrylate (5:4-18 and 3:31-60). Makhlof et al. also teaches use of polyurethane-acrylate prepolymers (1:5-10 and 3:31-60). Chesley et al. and Makhlof et al. are combinable because they are concerned with a similar technical difficulty, namely, molding of thermosetting resins. At the time of invention a person having ordinary skill in the art would have found it obvious to have used a thermosetting molding material having reactive diluents, as taught by Makhlof et al., in the process of Chesley et al., and would have been motivated to do so because

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Makhlouf et al. suggests that such resins have exceptional performance properties (1:12-24) and are easily removed from a mold surface (7:34-53).

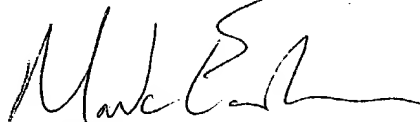
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Moren et al., Harvey et al., Cheley et al. '784, Fujiki, Tamura et al, Welygan et al., Poulakis, Wilson, Fischer, Parmelee, Clune, and Makhlouf et al. '060 all teach the basic state of the art.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Eashoo, Ph.D.  
Primary Examiner  
Art Unit 1732

3/15/04

2004-03-15  
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